

CLAIMS

- 1
2 **1.** A method, comprising:
3 retrieving printing device data from component memory on a replaceable
4 component used in a printing device;
5 storing the printing device data in a marketing database;
6 associating the printing device data with the printing device;
7 searching the marketing database for a printing device that meets certain
8 search criteria; and
9 applying a pre-determined marketing solution for a printing device found to
10 meet the search criteria.
11
- 12 **2.** The method as recited in claim 1, wherein the applying a pre-
13 determined marketing solution further comprises notifying a customer that uses
14 the printing device of a product that is related to the customer's use of the printing
15 device.
16
- 17 **3.** The method as recited in claim 1, wherein the printing device data
18 further comprises information regarding an environment of the printing device and
19 the search criteria includes a printing device environment criterion.
20
- 21 **4.** The method as recited in claim 1, wherein the printing device data
22 further comprises information regarding printing device usage and the search
23 criteria includes a printing device usage criterion.
24
25

1 **5.** The method as recited in claim 4, wherein the search criteria further
2 comprises a criterion that the printing device that is used with a specific
3 component.

4
5 **6.** The method as recited in claim 1, wherein:
6 the marketing database further comprises quality control data that identifies
7 problems with certain products when used under certain conditions; and
8 the search criteria comprises a product that is used under a condition
9 identified by the quality control data.

10
11 **7.** The method as recited in claim 1, wherein the search criteria further
12 comprises a particular type of printing device.

13
14 **8.** The method as recited in claim 1, wherein the search criteria further
15 comprises a component of a particular type of printing device.

16
17 **9.** The method as recited in claim 1, wherein the printing device is a
18 laser printer and the replaceable component is a toner cartridge.

19
20 **10.** The method as recited in claim 1, wherein the printing device is an
21 inkjet printer and the replaceable component is an ink cartridge.

22
23 **11.** The method as recited in claim 1, wherein the marketing solution is
24 stored in the marketing database and is associated with the printing device.
25

1 **12.** A system, comprising:

2 a marketing database that stores customer information for multiple
3 customers, the customer information including information on printing devices
4 and printing device replaceable components used by the customers;

5 a recycling center to receive a used printing device replaceable component
6 with component memory from a printing device of a customer, and to retrieve
7 printing device data from the component memory and store the printing device
8 data in the marketing database; and

9 a marketing center configured to search the marketing database for printing
10 devices having printing device data associated therewith that meet certain search
11 criteria, and to apply marketing solutions for printing devices identified by a
12 search.

13
14 **13.** The system as recited in claim 12, wherein applying marketing
15 solutions for printing devices identified by a search further comprises identifying a
16 customer that owns a printing device identified by a search and advertising a
17 product to the customer that is related to the customer's use of the printing device.

18
19 **14.** The system as recited in claim 12, wherein:

20 the printing device data further comprises printing device usage data that
21 indicates how the printing device was used when the replaceable component was
22 installed in the printing device; and

23 the marketing center is further configured to search the marketing database
24 for printing devices that meet specific usage criteria.
25

1 **15.** The system as recited in claim 12, wherein:
2 the marketing database further comprises quality control data that identifies
3 situations with certain manufacturer products when used under certain conditions;
4 the printing device data further comprises printing device usage data that
5 indicates how the printing device was used when the replaceable component was
6 installed in the printing device; and
7 the marketing center is further configured to search the marketing database
8 for printing devices that used under conditions identified as problematic by the
9 quality control data.

10
11 **16.** The system as recited in claim 12, wherein the printing devices
12 further comprise laser printers and wherein the printing device replaceable
13 components further comprise toner cartridges.

14
15 **17.** A method for marketing products to customers, comprising:
16 searching a marketing database for a printing device or printing device
17 replaceable component that meets certain search criteria, the marketing database
18 storing printing device data that has been retrieved from component memory of a
19 printing device replaceable component used in a printing device;
20 identifying a customer that uses the printing device; and
21 distributing marketing information to the customer, the marketing
22 information advertising products associated with customer use of the printing
23 device or printing device replaceable component.
24
25

1 **18.** The method as recited in claim 17, wherein:

2 the printing device data further comprises usage data; and

3 the search criteria further comprises one or more usage criteria.

4
5 **19.** The method as recited in claim 17, wherein:

6 the printing device data further comprises usage data;

7 the marketing database further comprises quality control data that indicates
8 problems that may occur when certain printing devices are used under certain
9 conditions; and

10 the search criteria further comprises a printing device that is used under
11 conditions proscribed by the quality control data.

12
13 **20.** The method as recited in claim 17, wherein the printing device
14 further comprises a laser printer, and wherein the printing device replaceable
15 component further comprises a toner cartridge.

16
17 **21.** A marketing database stored on one or more computer-readable
18 media, the database comprising a plurality of records, each record further
19 comprising:

20 a product identifier field that contains a value that uniquely identifies a
21 product;

22 a customer identifier field that contains a value that uniquely identifies a
23 customer that uses the product identified in the product identifier field;

1 a usage data field that contains usage data that indicates how the product
2 identified in the product identifier field is used by the customer identified in the
3 customer identifier field; and

4 a marketing solution field that contains a marketing solution that is to be
5 applied to the customer identified in the customer identifier field if the usage data
6 meets certain usage criteria.

7
8 **22.** The marketing database as recited in claim 21, wherein the usage
9 criteria is contained in the marketing solution field.

10
11 **23.** The marketing database as recited in claim 21, further comprising a
12 product identifier field that contains a value that uniquely identifies a type of
13 product.

14
15 **24.** The marketing database as recited in claim 21, further comprising a
16 quality control information field that contains information that indicates usage
17 conditions under which the product may malfunction.

18
19 **25.** The marketing database as recited in claim 21, wherein:
20 the product field further comprises a printer field that identifies a model of
21 printer;

22 the product identifier field further comprises a printer identifier field that is
23 a serial number that uniquely identifies a printer of the model indicated in the
24 printer field;
25

1 the usage data field contains data that indicates how the printer identified
2 by the serial number in the printer identifier field is used, the usage data being
3 collected from memory of a replaceable component that has been used in the
4 printer identified by the serial number in the printer identifier field.
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25